

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, D.C. 20231

Atty Dkt.: 2742-2

JC551 U.S. PTO
09/313644
05/18/99

Attached for filing is the patent application of:

Date: May 18, 1999

Inventor: PLOTKIN, Robert A.

Entitled: SYSTEM AND METHOD FOR MAKING LIVE
ANIMALS APPEAR TO TALK

and including attachments as noted below:

- ☒ Declaration, ☒ Abstract
18 pages of specification and claims (including 20 numbered claims), and
2 sheets of accompanying drawing/s. (Figures 1 and 2)
☐ Record & return the attached assignment to the undersigned.
☐ Priority is hereby claimed under 35 USC 119 based on the following foreign applications:

Application Number	Country	Day/Month/Year Filed
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, respectively.

Certified copy(ies) of foreign application(s): ☐ attached: ☐ filed on

in U.S. Application Serial No. _____

filed on _____

or in PCT Application No. _____

filed _____

- ☐ Please amend the specification by inserting before the first line --This is a _____ of PCT application _____, filed _____

Priority is hereby claimed under 35 USC 120/365 based on the following prior PCT applications designating the U.S.:

Application Number	Country	Day/Month/Year Filed
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This application is based on the following prior provisional application(s):

Application No.	Filing Date
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respectively, and priority is hereby claimed therefrom.

Please amend the specification by inserting before the first line: -- This application claims the benefit of U.S.

Provisional Application No. _____, filed _____

- ☒ Verified Statement attached establishing "small entity" status (Rules 9 & 27)

☐ The Examiner's attention is directed to the prior art cited in the parent application by applicant and/or Examiner for the reasons stated therein.

Preliminary amendment to claims (attached hereto), to be entered before calculation of the fee below.

Also attached:

FILING FEE IS BASED ON CLAIMS AS FILED LESS ANY HEREWITH CANCELED

Basic Filing Fee		\$	760.00
Total effective claims	20 - 20 (at least 20) = 0	x \$ 18.00	\$ 0.00
Independent claims	3 - 3 (at least 3) = 0	x \$ 78.00	\$ 0.00
If any proper multiple dependent claims now added for first time, add \$260.00 (ignore improper)			\$ 0.00
		SUBTOTAL	\$ 760.00
If "small entity," then enter half (1/2) of subtotal and subtract		-(380.00)
		SECOND SUBTOTAL	\$ 380.00
Assignment Recording Fee (\$40.00)			\$ 0.00
		TOTAL FEE ENCLOSED	\$ 380.00

Any future submission requiring an extension of time is hereby stated to include a petition for such time extension.

The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Account No. 14-1140**. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.

By Atty: Michael J. Shea, Reg. No. 34,725

Signature: Michael J. Shea

Applicant or Patentee: PLOTKIN, Robert A. Attorney's Dkt. No. 2742-2
 Serial or Patent No.: _____
 Filed or Issued: Concurrently Herewith
 For: SYSTEM AND METHOD FOR MAKING LIVE ANIMALS APPEAR TO TALK

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
 STATUS [37 19(f) and 1.27(c)] - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled:

SYSTEM AND METHOD FOR MAKING LIVE ANIMALS APPEAR TO TALK

described in

- ☒ the specification filed herewith.
☐ application Serial No. _____, filed _____
☐ patent No. _____, issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

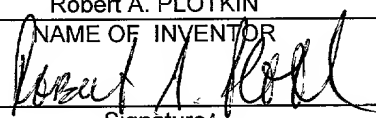
- ☒ no such person, concern, or organization
☐ persons, concerns or organizations listed below*

NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention availing to their status as small entities. (37 CFR 1.27)

Name	_____		
Address	_____		
	<input type="checkbox"/> Individual	<input type="checkbox"/> Small Business Concern	<input type="checkbox"/> Nonprofit Organization
Name	_____		
Address	_____		
	<input type="checkbox"/> Individual	<input type="checkbox"/> Small Business Concern	<input type="checkbox"/> Nonprofit Organization
Name	_____		
Address	_____		
	<input type="checkbox"/> Individual	<input type="checkbox"/> Small Business Concern	<input type="checkbox"/> Nonprofit Organization

I acknowledge the duty to file, in this application of patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. [37 CFR 1.28(b)]

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Robert A. PLOTKIN		
NAME OF INVENTOR	NAME OF INVENTOR	NAME OF INVENTOR
		
Signature	Signature	Signature
5/17/99		
DATE	DATE	DATE

Our Ref.: 2742-2

U.S. PATENT APPLICATION

Inventor(s): PLOTKIN, Robert A.

Invention: SYSTEM AND METHOD FOR MAKING LIVE ANIMALS APPEAR TO
TALK

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SPECIFICATION

SYSTEM AND METHOD FOR MAKING LIVE ANIMALS APPEAR TO TALK

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 The present invention relates to a system and method for making live animals appear to talk.

2. Description of the Prior Art

Various arrangements are known in the art for producing sounds from toys such as stuffed animals. For example, U.S. Patent
10 No. 5,775,970 to Klees et al. discloses a toy leash with an adjustable harness, electronic sound and a light which is attachable to one of a number of toy animals. Housed within a handle connected to the leash are a battery and integrated circuit or chip for generating various electronic sound signals such as for a barking dog, a
15 meowing cat, roaring lion or tiger, growling bear or the like. The appropriate sound signal is generated using one or more selector switches.

U.S. Patent No. 5,509,859 to Klees et al. discloses a novelty item for creating the illusion of an imaginary pet. Mounted within

the collar end of the leash is a micro speaker which is connected by wiring through a hollow leash to circuitry in the handle. The circuitry includes a conventional sound producing circuit for a plurality of simulated synthetic animal sounds such as a friendly dog bark, a mean dog growl, a friendly cat meow, and a scary cat hiss. One of these sounds is selected by appropriately depressing selector switches.

SUMMARY OF THE INVENTION

The present invention relates to a system for making a live animal appear to talk. The system has particular utility with household pets such as dogs and cats, although the invention is not limited in this respect. The system includes a speaker mounted on an article (such as a collar) worn by the animal. A memory stores a plurality of pre-recorded messages. These pre-recorded messages may be generic messages to be "spoken" by all types of animals or may be messages which are based on the characteristics (e.g., type, breed, size, age) of a particular animal. Using a selection circuit, a user is able to selectively output the pre-recorded messages from the memory to the speaker, thereby making the animal appear to talk. The selection circuit, the memory and a control circuit for causing the pre-recorded messages to be output from the memory to the speaker may be part of a system control panel. This control panel may be

conveniently attached to the handle of a leash which is secured to a collar worn by the animal.

The system may be configured so that the memory stores two or more pre-recorded messages constituting a conversation. The system may also be provided with a second speaker. This speaker may be arranged, for example, in the control panel or on an article worn by another animal. Using the selection circuit, the user may select the messages constituting the conversation for output to the two speakers. The selection circuit may be arranged so that a single input results in the output of all of the messages constituting the conversation from the memory to the speakers and the control circuit may be arranged to direct each message to the appropriate one of the speakers. In this way, the animal can appear to be involved in "conversations" either with its owner or with another animal.

The system may also be provided with one or more sensors for sensing a parameter such as air temperature. The sensed parameter may be used, at least in part, to select a pre-recorded message for output from the memory. Thus, for example, the animal can appear to be talking about current weather conditions.

The system may still further be provided with a timer. The control circuit is responsive to the timer for periodically (either at

regular or irregular intervals) automatically outputting one of the pre-recorded messages from the memory.

BRIEF DESCRIPTION OF THE DRAWINGS

These, as well as other objects and advantages of this
5 invention, will be more completely understood and appreciated by
careful study of the following more detailed description of a
presently preferred exemplary embodiment of the invention taken in
conjunction with the accompanying drawings, of which:

FIGURE 1 is a block diagram showing the elements of the
10 present invention; and

FIGURE 2 shows an implementation of an embodiment of the
present invention.

DETAILED DESCRIPTION

Figure 1 is a block diagram showing a system in accordance
15 with the present invention. The system includes a control circuit 10
such as a microprocessor, a memory 15, a selection circuit 20, a
power supply 25, a speaker 30 and an optional serial port 42.
Memory 15 is preferably a non-volatile memory and stores a plurality
of pre-recorded spoken messages as will be explained in greater

detail below. Selection circuit 20 permits a user to make selections including selections of one of the plurality of pre-recorded spoken messages from memory 15 for output by speaker 30 via a digital-to-analog converter (not shown).

5 The selection circuit 20 may comprise, for example, buttons or keys. These buttons or keys may be actuated individually or in combination to make selections including selections of a particular one of the pre-recorded spoken messages. The buttons or keys may include captions, labels or other indicia to assist the user in making
10 selections. The selection circuit 20 may alternatively comprise a touch-sensitive display screen. In this case, the selections are made by touching a designated area or areas of the display screen. The designated area or areas may include captions, labels or other indicia to assist the user in making selections. The selection circuit 20 may
15 comprise any combination of keys, buttons and a touch-sensitive display screen. Of course, the selection circuit 20 may be as simple as a single key or button that, in response to successive actuations, causes the output of the pre-recorded messages from memory 15 to speaker 30 in a random or in a pre-determined sequence.

20 Power supply 25 (such as one or more batteries) supplies power to the control circuit 10 and to any other components (e.g., a touch-sensitive display screen) requiring power.

Figure 2 shows an implementation of the above system in accordance with an embodiment of the present invention. In this embodiment, the speaker 30 is attached to a collar 40 worn by a dog. One end of a leash 50 is attached to the collar 40. The other end of
5 the leash 50 has a handle that is grasped by a person to restrain the dog when the dog is, for example, being walked. A control panel 60 is attached in any convenient manner to the handle 55. Control panel 60 accommodates the control circuit 10, memory 15, selection circuit 20 and power supply 25. Control panel 60 also includes a volume
10 control (not shown) for controlling the volume of the speaker output. Other controls such as bass and treble may be provided, if desired, as is known in the art. Of course, various ones (or even all) of the components (e.g., control circuit 10 and memory 15) may be configured for attachment to collar 40 along with speaker 30 and the
15 present invention is not limited in this respect.

Control panel 60 and speaker 30 are connected via a wired path. The wire may be located in the body of the leash or may be secured to or wrapped around the outside of the body of the leash. Alternatively, the control panel and the speaker may be connected via
20 a wireless link. The use of a wireless link provides greater flexibility with respect to the positioning of the control panel, which of course is not limited to a position in which it is attached to handle 55.

The collar and leash combination may be unitary or the leash may be detachably coupled to the collar by using a coupling mechanism. In the case of the detachable coupling, the speaker and the control panel may be connected over a wireless link or the end of
5 the wire that connects the control panel to the speaker may be provided, for example, with a plug which is plugged into a jack connected to the speaker.

Memory 15 may be configured in various ways. For example, memory 15 may be a memory which stores pre-recorded messages
10 for a particular type or breed of animal. Thus, memory 15 may store a set of pre-recorded generic messages for a dog or a set of pre-recorded messages for a cat. Alternatively, memory 15 may store a set of pre-recorded messages created for a particular breed of animal such as a French poodle or a Siamese cat.

15 Memory 15 may also be configured to store pre-recorded messages for a plurality of different types and/or breeds of animals. Using the selection circuit 20, the user may initially select a particular type and/or breed of animal. After making this selection, the system allows the user to select from among the pre-recorded
20 messages appropriate for use with an animal of the selected type and/or breed. Thus, the system is user configurable and the same

system may be easily adapted for use with many different types and breeds of animals.

Memory 15 may also be configured as a portable memory module adapted to be removably attachable to the control panel 60 via a memory module port (not shown). The user uses the selection circuit 20 to selectively output pre-recorded messages from among the pre-recorded messages on the portable memory module. Different portable memory modules will store messages for animals of different types and breeds. For example, one portable memory module may store generic messages for any type of dog; another portable memory module may store generic messages for any type of cat; and still another portable memory module may store messages for a particular type of dog (e.g., a French poodle). It will be apparent that the use of portable memory modules provides a system which may be easily adapted for use with pets of different types (e.g., cats and dogs) or breeds (e.g., bulldogs and French poodles).

The system may also be configured for connection to a computer via serial port 42. Using this connection, memory 15 may be loaded or updated with pre-recorded messages stored by or accessible to the computer. For example, the memory of the computer may contain various pre-recorded messages. The pre-recorded messages may be loaded into the memory of the computer

from a disk provided to the user when the system is purchased.

Using the computer, the user may then select certain ones of these pre-recorded messages for loading into the memory 15 via serial port 42. In another implementation, the computer may be connected to a particular web site using conventional browser software. The web site provides various pre-recorded messages which may be selected for loading into the memory 15 via serial port 42. The pre-recorded messages on the web site may be organized according to animal type, breed, size, age, etc. This arrangement permits a user to select pre-recorded messages from among a large number of messages, as well as easy adaptation of the system to pets of different types or breeds and to the preferences of a particular user. The computer may also be used by the user to record his or her own messages using conventional equipment and software. These recorded messages may likewise be loaded into memory 15 via serial port 42.

The messages stored in memory 15 comprise of one or more spoken words and may be in any language, accent or voice type. It is also contemplated that the messages may comprise songs or parts of songs which can be accompanied or unaccompanied by appropriate background music. As noted above, the messages may be generic to all pets or may be tailored to specific types of pets or to specific breeds of a particular type of pet. An example of a generic message that may be pre-recorded in memory 15 for a pet dog is: "It's a dog

eat dog world out there.” An example of a generic message that may be pre-recorded for a pet cat is: “I want to be left alone.” If desired, this message may be recorded with a Greta Garbo-like accent.

Messages specific to a particular breed may also be pre-recorded.

- 5 For example, a message for a boxer might be: “You should see the other guy.” A message for a Doberman might be: “I’m not looking for any trouble.” Messages for a French poodle may be recorded with a French accent.

- 10 It will be apparent that the content and characteristics (e.g., accents, high pitch voice, low pitch voice, etc.) of the pre-recorded messages are limited only by the imagination of the person making the recordings and by the intended audience. Thus, certain messages may be developed for a humorous or amusing effect while walking a dog around the neighborhood. In another implementation, certain
- 15 messages may be developed for use with animals in a zoo. More particularly, a speaker may be attached to an article worn by an animal in a zoo. A visitor to the zoo may use a control panel (mounted for example adjacent to the animal's enclosure and configured for wireless transmissions to the speaker) to cause the
- 20 speaker worn by the animal to selectively output pre-recorded messages. There may, for example, be a set of pre-recorded messages which are suitable for use with children. For example, the messages may include statements of the type of animal, the animal's

name, how old the animal is, what the native habitat of the animal is, and the like. With appropriate inputs to the selection circuit, the user can select certain ones of these messages to be output from the speaker worn by the animal. Such a system would be particularly
5 advantageous in a petting zoo for small children.

Those skilled in the art will readily understand that the functionality described herein can be achieved through the use of different components and the particularly circuitry associated with the control circuit 10, memory circuit 15, selection circuit 20 and/or
10 control panel 60 can have many variations. Those skilled in the art will understand how the system of the present invention can be constructed in light of this disclosure and general knowledge in the industry. In addition, various technologies exist for recording spoken or sung messages in a format suitable for storage in a memory and
15 those skilled in the art will readily understand how these technologies may be used in the system described herein.

In another implementation of the present invention, a second speaker is provided. This speaker may be provided, for example, in the leash handle or on the control panel. In this way, the pet can be
20 involved in "conversations". In this implementation, the memory 15 may store pre-recorded messages that simulate a conversation (e.g., questions and answers or a series of comments about a particular

topic). Using the selection circuit, the user may select the messages constituting the conversation for output to the speakers. The selection circuit may be arranged so that a single input results in the output of all of the messages of the conversation from the memory to the speaker and the control circuit may be arranged to direct each of the messages to the appropriate one of the speakers. In a variation of this implementation, the second speaker may be provided on an article worn by another animal or pet. In this way, two animals or pets can appear to be involved in a conversation.

In still another implementation, one or more sensors may be incorporated in or connected to control panel 60 for sensing parameters such as air temperature and the messages spoken by the pet may be determined, at least in part, based on the sensed parameter(s). For example, on a particularly cold day (e.g., one on which the temperature is below some predetermined temperature), the selection circuit may permit the user to select a pre-recorded message such as: "It's not fit for man nor beast." A sensor may also be provided to sense certain sounds or even words. For example, a sensor may be provided to sense a series of barks by a dog. In response to the sensing of this series of barks, the control circuit may automatically cause the message "Don't make me come over there" to be output via speaker 20.

In a still further implementation, control circuit 10 may be responsive to a timer for periodically automatically outputting one of the pre-stored messages. The timer may be set by the user using the control panel 60 to thereby automatically output one of the pre-stored
5 messages at regular or irregular intervals. The messages may be output randomly, in a predetermined sequence or in a sequence determined by the user.

While the invention has been described in connection with what is presently considered to be the most practical and preferred
10 embodiment, it is to be understood that the invention is not to be limited to the disclosed embodiment, but on the contrary, is intended to cover various modifications and equivalent arrangements included within the spirit and scope of the appended claims.

WHAT IS CLAIMED IS:

- 1 1. A system for making a live animal appear to talk, the
2 system comprising:
3 a first speaker mounted on an article worn by the animal;
4 a memory for storing pre-recorded phrases;
5 a selection circuit configured to receive user-supplied inputs;
6 and
7 a control circuit responsive to the user-supplied inputs for
8 selectively outputting the pre-recorded phrases from said memory to
9 said first speaker thereby making the animal appear to talk.
- 1 2. The system according to claim 1, wherein the pre-
2 recorded phrases stored in said memory are based on the
3 characteristics of the animal.
- 1 3. The system according to claim 1, further comprising a
2 second speaker.
- 1 4. The system according to claim 3, wherein said memory
2 stores two or more phrases constituting a conversation and said
3 control circuit is responsive to the user-supplied inputs for supplying
4 the phrases constituting the conversation to said first and second
5 speakers.

1 5. The system according to claim 1, wherein said first
2 speaker is connected to said control circuit over a wireless
3 communication link.

1 6. The system according to claim 1, further comprising:
2 a sensor,
3 wherein said control circuit is responsive to a parameter sensed
4 by said sensor for automatically outputting a pre-recorded phrase
5 from said memory to said first speaker.

1 7. The system according to claim 6, wherein said parameter
2 senses temperature.

1 8. The system according to claim 1, further comprising:
2 a timer,
3 wherein said control circuit is responsive to said timer for
4 periodically automatically outputting a pre-recorded phrase from said
5 memory to said first speaker.

1 9. The system according to claim 1, wherein said selection
2 circuit comprises a touch-sensitive display screen.

1 10. The system according to claim 1, wherein said memory
2 comprises a portable memory module.

1 11. The system according to claim 1, wherein said memory
2 is adapted to have its contents updated by connection to a computer.

1 12. A system for making a pet appear to talk, the system
2 comprising:

3 a leash member for restraining the pet;

4 a collar attached to one of said leash;

5 a speaker mounted on said collar;

6 a control panel including a memory for storing a plurality of
7 pre-recorded phrases, a selection circuit for receiving user-supplied
8 inputs and a control circuit responsive to the user-supplied inputs for
9 selectively outputting the pre-recorded phrases from said memory to
10 said speaker thereby making the pet appear to talk.

1 13. The system according to claim 12, wherein a handle is
2 disposed at the other of said leash and said control panel is secured to
3 said handle.

1 14. The system according to claim 12, wherein said control
2 panel is connected to said speaker via a wireless link.

1 15. The system according to claim 12, wherein said memory
2 comprises a portable memory module.

1 16. The system according to claim 12, wherein the pre-
2 recorded phrases stored in said memory are based on the
3 characteristics of the pet.

1 17. The system according to claim 12, further comprising:
2 a sensor,
3 wherein said control circuit is responsive to a parameter sensed
4 by said sensor for automatically outputting a pre-recorded phrase
5 from said memory to said speaker.

1 18. The system according to claim 12, further comprising:
2 a timer,
3 wherein said control circuit is responsive to said timer for
4 periodically automatically outputting a pre-recorded phrase from said
5 memory to said first speaker.

1 19. A method of making an animal appear to talk,
2 comprising:
3 storing in a memory a plurality of pre-recorded phrases, the
4 pre-recorded phrases being based on characteristics of the animal;
5 attaching a speaker to the animal;
6 selecting one of the pre-recorded phrases from said memory
7 for output to the speaker, whereby the animal appears to talk.

1 20. The method according to claim 17, further comprising:
2 storing in said memory two or more pre-recorded phrases
3 constituting a conversation;
4 attaching another speaker to another animal; and
5 selecting the phrases constituting the conversation from said
6 memory for output to the speakers, whereby the animals appear to
7 converse with each other.

ABSTRACT OF THE DISCLOSURE

A system and method for making animals appear to talk is provided. The system includes a speaker mounted on an article (such as a collar) worn by the animal. A memory stores a plurality of pre-recorded messages. These pre-recorded messages may be generic phrases to be "spoken" by all types of animals or may be messages which are based on the characteristics of a particular animal. Using a selection circuit, a user is able to selectively output the pre-recorded messages from the memory to the speaker, thereby making the animal appear to talk.

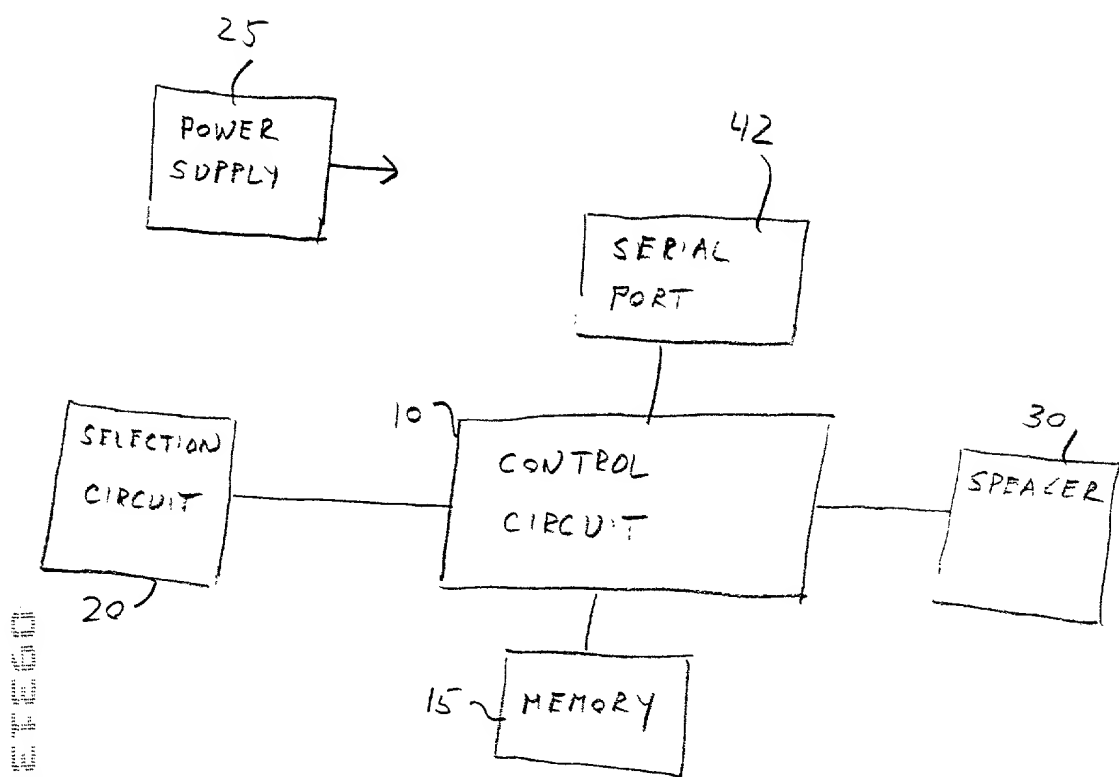


Figure 1

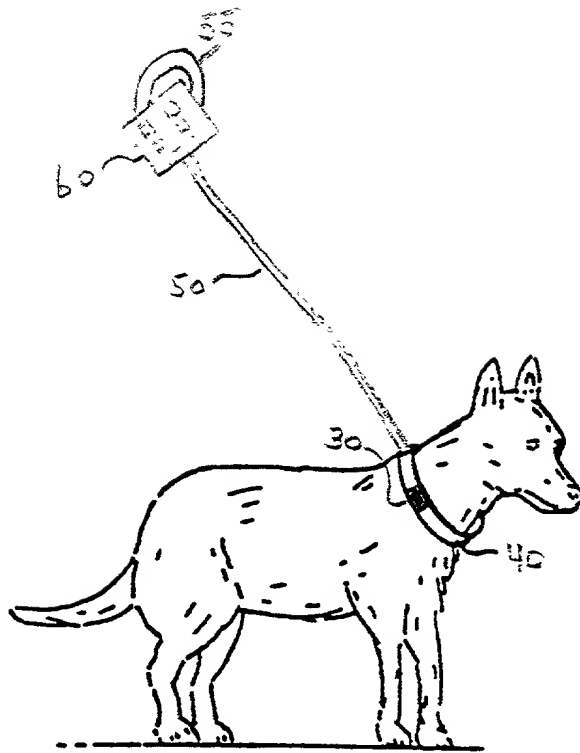


Figure 2

RULE 63 (37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYSTEM AND METHOD FOR MAKING LIVE ANIMALS APPEAR TO TALK

the specification of which (check applicable box(es)):

☒ is attached hereto
☐ was filed on _____ as U.S. Application Serial No. _____ (Atty Dkt. No. 2742-2)
☐ was filed as PCT International application No. _____ on _____
 and (if applicable to U.S. or PCT application) was amended on _____

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed, before the filing date of this application:

Priority Foreign Application(s):

Application Number	Country	Day/Month/Year Filed
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I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

Application Number	Date/Month/Year Filed
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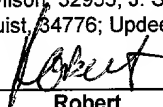
I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed above or below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior applications in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S./PCT Application(s):

Application Serial No.	Day/Month/Year Filed
------------------------	----------------------

Status: patented
 pending, abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. And I hereby appoint **NIXON & VANDERHYE P.C., 1100 North Glebe Rd., 8th Floor, Arlington, VA 22201-4714, telephone number (703) 816-4000 (to whom all communications are to be directed)**, and the following attorneys thereof (of the same address) individually and collectively my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and with the resulting patent: Arthur R. Crawford, 25327; Larry S. Nixon, 25640; Robert A. Vanderhye, 27076; James T. Hosmer, 30484; Robert W. Faris, 31352; Richard G. Besha, 22770; Mark E. Nusbaum, 32348; Michael J. Keenan, 32106; Bryan H. Davidson, 30251; Stanley C. Spooner, 27393; Leonard C. Mitchard, 29009; Duane M. Byers, 33363; Jeffrey H. Nelson, 30481; John R. Lastova, 33149; H. Warren Burnam, Jr. 29366; Thomas E. Byrne, 32205; Mary J. Wilson, 32955; J. Scott Davidson, 33489; Alan M. Kagen, 36178; William J. Griffin, 31260; Robert A. Molan, 29834; B. J. Sadoff, 36663; James D. Berquist, 34776; Updeep S. Gill, 37334; Michael J. Shea, 34725; Donald L. Jackson, 41090; Michelle N. Lester, 32331 *

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	Residence: (city) <u>Reading</u>	(state/country) <u>Pennsylvania</u>
	Post Office Address: <u>c/o Madelyn S. Fudeman, Esq., DESANTIS, DESANTIS & ESSIG, 708 Centre Avenue, P.O. Box 14926,</u>	
	<u>Reading, Pennsylvania</u>	
	(Zip Code) <u>19612-4926</u>	
2.	Inventor's Signature: _____	Date: _____
	Inventor: _____	_____
		(first) MI (last) (citizenship)
	Residence: (city) _____	(state/country) _____
	Post Office Address: _____	
	(Zip Code) _____	